

## NOTES ON INDIAN BUTTERFLIES

BY

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(Continued from page 973, of Vol. XXIX)

43. The following additions and corrections are needed to the papers appearing in the Journal on the 'Identification of Indian Butterflies' :—

- A. 1. 4.  $\alpha$ . Add locality 'Orissa'.
- A. 2. 9.  $\beta$ . Add locality 'Andamans'.
- A. 2. 10.  $\gamma$ . Add locality 'Andamans'.
- A. 2. 12. (13). Middle of line for  $\varphi$  read  $\delta$ .
- A. 2. 14. Add locality 'S. Shan States'.
- A. 2. 16 (15). For 'red' read 'white'.
- A. 2. 18.  $\beta$ . Add locality 'Chin Hills'. The butterfly has been obtained on Mount Victoria.
  - A. 3. 2.  $\beta$ . for 'hypochra' read 'hypochroa'.
  - A. 4. 2. for 'menon' read 'mennon'.
  - A. 4. 5. Alter 'leococelis' to 'leucocelis'.
  - A. 4. 9.  $\gamma$ . Alter 'ployctor' to 'polyctor'.
  - A. 4. 10.  $\beta$ . Add locality 'Orissa'.
  - A. 4. 17. Alter locality 'Karens' to 'S. Burma'.
  - A. 4. 21.  $\alpha$ . Add locality 'Orissa'.
  - A. 4. 5.  $\beta$ . Alter locality 'Karens' to 'S. Burma'.
  - A. 5. 5. Alter nymotypical name from 'anticrates' to 'aristeus'.
  - A. 6. 7. Alter 'Shan States' to 'Assam'.
  - A. 8. 1.  $\beta$ . Insert 'to Dawnas'.
  - A. 8. 2.  $\alpha$ . Alter 'payani' to 'payeni'.
  - A. 8. 2.  $\beta$ . Alter 'Karens' to 'Dawnas'.
  - A. 9.  $\beta$ . Alter 'Karens' to 'Ataran'.
  - A. 13. 1. Alter 'discobolus, Alph' to 'discobolus insignis, Stg'.
  - B. 3. In keys to genera and species alter 'Synchloe' to 'Euchloe'.  
*Synchloe* is a synonym of *Pieris*, the generic type being *callidice*.
  - B. 8. In keys to genera and species alter 'Anaphaeis' to 'Belenois', which is the older name.
  - B. 1. Alter 'xiphia' wherever it occurs to 'nina', which is the older name.
  - B. 3. 3. Add locality 'Baluchistan'. I have not ascertained whether it is true *daphalis* or the race *ausonia* that occurs in Baluchistan.
  - B. 4. 7. Insert at end :—
    - ' $\gamma$ .  $\delta$  dark veining very pronounced.  $\varphi$  nearly black.  
*napi melaina*, Verity. Chumbi Valley. NR.'
  - B. 4. 10.  $\beta$ . Alter 'canidia canidia, Sparr' to 'canidia indica, nov.' As pointed out by Mr. Watkins *canidia* is referable to the larger Chinese race. Also alter 'N. Burma' to 'Dawnas'.
  - B. 5. 1.  $\alpha$ . Alter 'M' to 'Mar'.
  - B. 5. 2.  $\beta$ . Alter 'Ersch' to 'Bdv'.
  - B. 5. 3. Delete 'larraldei' which according to Watkins is not conspecific with *harrietae*.
  - B. 4. 5.  $\gamma$ . Alter 'Assam' to 'S. Shan States'.
  - B. 6. 4 (5a). Alter to 4b (6a) and delete 'Black with——spots,' after which insert :—
    - '4(5). Unf no well defined sub-apical pale spots.
    - a. Upf whole of outer half white and on unh there are broad white streaks.  
*sanaca sanaca*, M. (70-85). The Pale Jezabel. Kulu to Kumaon, N.R.  
 $\beta$ . Much darker and smaller.  
*sanaca perspicua*, Fruh. Sikkim to Dawnas. VR.
  - 5(4). Unf with well defined small white spots. Above black with white spots; variable.'

Under B. 6. 5.δ. Alter '*perspicua*, *Fruh*' to '*burmana*, nov' and alter 'Shan States' to 'Ataran'. Increase all subsequent numbers in the key by 1. I am indebted to Mr. Watkins for confirming an old suspicion of mine that *sanaca* and *belladonna* were separate species and also for pointing out that *perspicua*, which I have not seen is a *sanaca* form allied to the Chinese *subnubila*.

- B. 6. 7. *Add* locality 'Nepal'.
- B. 6. 8. *a.* *Insert* locality 'Vizagapatam'.
- B. 6. 8. *β.* Alter 'Sikkim' to 'Simla'.
- B. 10. 1. Alter 'Karens' to 'S. Shan States'.
- B. 10. 2. *β.* Alter 'alage' to 'lalage'.
- B. 10. 6. *a.* I changed the name *venusta* to *norma* in B.N.H.S., xxix, 971, but my name should sink to *principialis*, *Fruh*.

B. 13. 1. *Insert* as the trivial name 'The Plain Sulphur'.

B. 15. 2 and 3. There is a growing consensus of opinion (Messrs. Riley, Watkins, Ormiston and Talbot) that *venata* is merely a seasonal form of *laeta*. Breeding experiments are required to establish the opinion.

- B. 15. 4. Alter 'M' to 'Wall'.
- B. 15. 5 (4.6). *alter* to 5a (4.7) and *insert* after it :—  
‘5 (6). Unf, apical area not entirely brown.’
- After '*hecabe nicobariensis*' *insert* :—  
‘6 (5). Unf apical area entirely dark brown.

*lacteola sarinoides*, *Fruh.* (40-50). The Scarce Grass Yellow.

Sikkim to S. Burma. VR.'

Alter 4 (5.6) to 4 (5a. 7); 6 (5.4) to 7 (5a. 4); 4b (7) to 4b (8); 7 (4b) to 8 (4b). The new species is the result of investigations by Riley and Watkins.

- B. 15. 7. *a.* Alter '*rotundalis*, *M.*' to '*ormistoni*, *Watkins*'.
- B. 15. 7. *β.* Alter '*andersoni*' to '*sodalis*', which name is prior.
- B. 15. 7. *γ.* Alter '*Swin*' to 'M'.
- B. 16. 1b (3a). *Alter* to 4a and *insert* after it :—  
‘1 (2a). Upf no spot end cell. ♂ pale sulphur yellow with uniform broad black border. ♀ paler with yellow marginal spots.  
*marcopolo*, *GC*. (42). Marco Polo's Clouded Yellow. Thui Nallah, Gilgit. VR.

2a (1). Upf always dark spot end cell.'

Alter 1a (7a) to 1a (8a) and subsequent numbers in genus to be increased by 1. *marcopolo* was obtained by Gen. Tytler's collectors.

B. 16. 4. Delete '*nastes*'; *thrasibus* has nothing to do with *nastes*, but may be conspecific with some C. Asian *Colias*.

- B. 16. 10. *Alter* *a* and *β* to *β* and *γ* and *insert* :—  
‘*a.* as *β* but smaller and not so brilliant. ♀ upf not so dark.  
*cogene shandura*, nov. Chitral NR.’

and delete the locality 'Chitral' under *β*.

- B. 16. *Add* at end of genus :—  
‘Note. *phicomone phila*, *Fruh.*, was described in error from Kashmir.’

B. 17. 1. *Delete* the race *marianne nola*, which is only the extreme dry season form of *marianne* and may occur anywhere.

B. 17. 2. Alter '*pirenassa*, *Wall*' to '*saladra*, *M*'; '*rhexia*, *F*' to '*pirenassa* *Wall*'; '*moulmeinensis*, *M*' to '*meipona*, *GrS*'.

- B. 17. 2. *η.* Alter 'Karens' to 'Dawnas'.

- B. 20. 1. *a.* Alter '*aviatar*' to '*avatar*'.
- B. 20. 2 and 3. I believe that *ceylanica* will turn out to be conspecific with *valeria*, but further evidence is necessary. They fly together in South India, and probably interbreed.

- C. 2. 1a (8a). *Insert* 'usually' after 'v. 5'.
- C. 2. 5. *β.* Alter '*Guer*' to '*Gray*'.
- C. 2. 14. Alter '*alcippus*, *Cr.*' to '*alcippoides*, *M*'.
- C. 3. 11. Alter '*Tavoy*' to 'Ataran'.
- C. 3. 14. *Insert* locality 'Manipur to S. Burma'.
- D. 2. 8. Alter '*Tavoy*' to 'Dawnas'.
- D. 3. 6. Alter 'Sikkim' to 'Garhwal'.
- D. 3. 9 and 10. I am not sure that I was correct in naming these 'species'; they may turn out to be dry season forms of *vaiwarta* and *sidonis*,

D. 3. 20 (21), after 21a (20) should be altered to 21 (22).

D. 3. 22. *β.* *Insert* 'to Dawnas' after 'Hills'.

- D. 3. 29. Insert after locality '—S. Shan States'.  
 D. 3. 33. β. Insert '—Ruby Mines' after 'Nagas'.  
 D. 3. 37. β. Insert after locality '—Dawnas'.  
 D. 3. 38. Insert 'Ruby Mines'.  
 D. 3. 41. α. Alter first ♀ to ♂.  
 D. 3. 46. Alter 'Karen's' to 'Dawnas'.  
 D. 3. 48. Alter 'Dusky' to 'Scarce'.  
 D. 3. 51. Alter 'Karen's' to 'Dawnas'.  
 D. 3. 52. Alter 'N. Burma' to 'Dawnas'.  
 D. 4. 2a(1). Alter 'v2' to 'v4'.  
 D. 4. 2. Insert the locality 'Kurram'.  
 D. 7. 1. Insert the locality 'Lahoul'.  
 D. 7. 2. Insert the locality 'Kurram'.  
 D. 7. 8. β. Insert the locality 'Khyber'.  
 D. 8. 4(5a). Delete up to 5a(4); alter 5(6) to 4(5) and 6(5) to 5(4); add at end of genus:

'Note. *semele diffusa*, Butler, was described in error from India.'

- D. 9. 1.α. Alter 'igna' to 'digna'.  
 D. 9. 2.γ. Insert the locality 'Baltistan, Ladak'.  
 D. 11. 1a(5) Alter to 1a(4).  
 D. 11. 2.α. Insert the locality 'Kurram'.  
 D. 13. 6. Alter 'M' to 'But'.  
 D. 13. 7. Mr. Watkins (A.M.N.H., 1925, page 233) has found that Moore's types of *annada* in the B.M. came from Bhutan and do not correspond with the familiar N.W. Himalayan insect which passes under the name of *annada*. He has also discovered that the name *suroia* must fall to *polyphemus*, which name was misapplied by Leech and Seitz to a large Chinese form, which Watkins has christened *oberthueri*. Whether true *annada*, true *polyphemus*, *orixa*, Mr. Watkins' *caeca* for the familiar *annada* and his *watsoni* are conspecific, I cannot say; for the present I leave them as races of *annada* and make the following corrections: alter β and γ to γ and δ; after description to γ insert

'Unh white irrations more striated.'

and after description to δ insert:

'Tornal ocelli obsolete. No male brand.'

Add the following new races:

- \* β. Unh tornal ocelli pupilled. Very like last.  
*annada annada*, M. Nepal, Bhutan. VR.  
 η. Unh white irrations reaching apex; dark bands sharply defined and traces of sub-basal fascia. Very like last.  
*annada watsoni*, Watkins. (52-56). Chin Hills. R.'

Under α for '*annada annada*, M.' read '*annada caeca*, Watkins' and add after description 'Tornal ocelli unpupilled'.

- D. 13. 9. Insert the locality 'Sikkim'.  
 D. 14. 15. Alter 'Mar' to 'M'.  
 D. 14. 17. Insert the locality 'Manipur to S. Burma'.  
 D. 14. 19. Alter 'Karen's' to 'Dawnas'.  
 D. 17. 1. Insert the locality 'Karen's to S. Burma'.  
 D. 25. 1. Alter 'M' to 'Butler'.  
 D. 25. 8. β. Alter 'Karen's' to 'Dawnas'.  
 D. 25. 9. Insert the locality 'Dawnas'.  
 D. 25. 12. γ. Alter 'Fruh' to 'M'.  
 E. 4. In key to genera and to species alter '*Stictopthalma*' to '*Siccuphalma*'.

- E. 2. 3. Insert the locality 'Chin Hills.'

- E. 4. β. Insert at end of description:

'Uph tawny colour surrounds the sagittate spots.

*louisa fruhstorferi*, Rob. N. Shan States. R.

γ. As last, but tawny colour clear of the sagittate spots'

- E. 5. 1. Alter 'Wd' to 'Db'.  
 E. 6. 1. Alter 'Karen Hills' to 'S. Burma'.  
 E. 7. α. Insert the locality 'Bassein'.  
 E. 8. Alter 'Wd' to 'Db'.  
 E. 10. 1. Alter 'Fruh' to 'Stich.'

- F. 24. In key to genera and to species alter 'Liminitis' to 'Limenitis.'
- F. I. 1. Insert after the description :
- 'a. Paler and upfr pale margin very broad,'  
and add the following race :
  - 'b. Darker. Upfr pale margin narrow.  
*durnfordi durnfordi*, Dist. 'Tavoy to S. Burma. VR.'
- Under a Alter 'S. Burma' to 'Dawnas.'
- F. I. 2. ♂. Alter ♂ to ♀ and insert the locality 'Andamans.'
- F. I. 6. Insert the locality 'Karens to S. Burnia.'
- F. 2. 5. Alter 'jalysus, Fd' to 'jalysus ephesus, Fruh' and also alter 'Begum' to 'Nawab.'
- F. 2. 6. Insert the locality 'Mergui.'
- F. 2. 7. γ. Alter 'Roth' to 'Fruh.'
- F. 2. 7. δ. Alter 'Karens' to 'Dawnas.'
- F. 7. Alter 1a(6a) to 1a(7a); 1b(3a) to 1b(4a) and insert :  
'1(2a). Above tawny with black apical markings upfr. Below as *sordida*.  
*cooperi*, Tytler. (60-70). Cooper's Emperor. N. Shan States, R.  
2a(1). Above dark brown or greenish brown.'
- Alter 1(2) and 2(1) to 2(3) and 3(2); alter 3a(1b) to 4a(1b); increase all remaining numbers in the genus by 1.
- F. 7. 5. β. Alter 'Shan States' to 'Dawnas.'
- F. 7. 8. γ. Alter 'God' to 'Wd' and insert the locality 'Orissa.'
- F. II. 1b. Alter 'Assam' to 'S. Shan States.'
- F. II. 2. Alter 'mena' to 'nicévillei.' Mr. Watkins informs me that *mena* from Hong Kong is quite a different species and he also thinks that *jermyni*, Druce, which I have treated as a synonym is also a distinct species. The *Euripus* section of the Nymphalidæ are very liable to freaks and I believe that *nicévillei* (caught once at Chamba) and *jermyni* (2 specimens caught together near Mussoorie) will prove to be freaks of *persimilis zella*.
- F. 18. 9. a. Insert the locality 'Sikkim.'
- F. 18. 22. Alter 'Fd' to 'Tytler.'
- F. 18. 25. β. Alter 'GrS' to 'M' and 'Karens' to 'Dawnas.'
- F. 18. 29. a. Alter 'M' to 'Db and Wd.'
- F. 24. 2. Alter 'N. Burma' to 'Dawnas.'
- F. 24. 4. Alter 'M' to 'Db and Hew.'
- F. 24. 5. Alter 'N. Burma' to 'Shan States.'
- F. 26. 6. Alter 'kresna, M' to 'moorei, Fruh.'
- F. 25. 10. Alter 'kresna' to 'karwara.'
- F. 26. 7a(5b). Alter 'unh' to 'unf' in the second line.
- F. 26. 14. a. Alter 'Assam to N. Burma' to 'Sikkim to S. Shan States.'
- F. 26. 15. β. Alter 'Karens' to 'Dawnas.'
- F. 26. 21. Insert the locality 'S. Shan States.' One specimen was obtained by Capt. Drummond.
- F. 26. 25. Alter 'Shan States' to 'Dawnas.'
- F. 30. 2. In last line of description alter 'DSF' to 'WSF.'
- F. 31. Insert locality the 'Andamans.'
- F. 33. η. Alter 'andamanica, M.' to 'andamana, Fruh.'
- F. 35. 1b. Alter 'oenone, Cr.' to 'magna, nov.' Mr. Watkins informs me that *oenone* is referable to an African form.
- F. 35. 5. Alter 'Joh' to 'L.'
- F. 38. 1. Alter 'Kumaon' to 'Kulu.'
- F. 39. 1. δ. Alter 'Joh' to 'L.'
- F. 39. 2. α. Alter 'M' to 'Koll.'
- F. 39. Alter 10b (13a) to 10b (14a); 10c (12) to 10c (13); 10 (11) to 10 (11a); 11 (10) to 11a (10); α to 11 (12); 'gemmae mackinnoni' to 'eugenia mackinnoni'; β to 12 (11); 12 (10c) to 13 (10c) 13a (10b) to 14a (10b); 13 (14) and 14 (13) to 14 (15) and 15 (14).
- F. 40. 2b (4) alter to 2b (5); 2 (3) to 3 (4) inserting before it :  
'2 (3a). Below the bands, etc., are nearly obsolete. Above a somewhat fiery red with reduced markings.  
*saxatillis ferghana*, Stg. (45). The Fiery Fritillary. Gilgit, Hunza. R.  
3a (2). Unh and above strongly marked.'
- Alter 3 (2) to 4 (3) and 4 (2b) to 5 (2b). This butterfly was found by Gen. Tytler's collectors in the Gilgit area and by the Visser expedition in Hunza.
- F. 45. 6. Alter 'God' to 'Guer.'

**F. 50.** 2.  $\alpha$ . Alter 'Karens' to 'N. Shan States.'

**F. 52.** Alter 'Hub' to 'Fab.'

**G. 3.** 2.  $\gamma$ . Insert the locality 'Dawnas.'

**G. 3.** 4. Alter 'Karens' to 'Dawnas.'

**G. 3.** 5.  $\beta$ . Alter 'Karens' to 'Dawnas.'

**G. 6.** Alter 'boulteri' to 'bouletti.'

**H.** Carry out following alterations in the Genera key. Alter 37b (94) to 37b (95); 37c (44a) to 37c (45a); 40b (43) to 40b (43a); 43 (40b) to 43a (40b); 43a (43b) to 43 (44); 43b (43a) to 44 (43); 44a (37c) to 45a (37c); 44 (45a) to 45 (46a); 45a (44) to 46a (45); 45b (81a) to 46b (83a); then increase by 1 all numbers up to 56a (50b); 56b (58a) to 57(b) (60a); 56 (57) to 57(c) (59) and delete.

'H 2 nearly equal tails at vs. 1 and 2'; insert

'57 (58). H lobe ill developed tail at v2 half as long as tail at v1.

*Apharitis, Riley.* The Silverlines.

58 (57). H lobe prominent; tails at vs 1 and 2 nearly equal.'

Alter 57 (56) to 59 (57c); 58a (56b) to 60a (67b); then increase by 2 all numbers up to 64c (69e); alter 64d (66a) to 68a (67); delete 64 (65) and run on; insert after 'Charana'.

'67a (66). ♂ with secondary sexual characters'.

Alter 65 (64) to 67 (68a) and add at the end of the description ♂ with a black area of modified scales about end cell upf.'

Then increase all numbers by 2 up to 80 (79); alter 81a (45b) to 83a (46b); then increase all numbers by 2 up to 89a (85c); alter 90 (91a) to 91 (92a); 91a (90) to 92a (91); 91 (92) to 92 (93); 92 (91) to 93 (92); 93 (85b) to 94 (87b); 94 (37b) to 95 (37b). Alter genera numbers in the Species keys and footnotes as altered in the Genera key.

**H. 2.** 6 Insert locality 'Dawnas'.

**H. 6.** 7. Alter 'Fruh' to 'M'.

**H. 17.** 2. Alter 'N. Burma' to 'S. Shan States'.

**H. 20.** 1. Alter 'Fruh' to 'Fd'.

**H. 20.** 11b (18a) alter to 11b (19a); 11 (12a) to 11 (13a); 11a (11b) to 11 (12); 11b (11a) to 12 (11); increase all remaining numbers in genus by 1.

**H. 20.** 16. Insert locality 'Ceylon'.

**H. 20.** 17.  $\gamma$ . Alter 'M' to 'DeN'.

**H. 22.** 2.  $\beta$ . Insert locality 'Kurram'.

**H. 22.** 4. Alter 'F' to 'Trimen'.

**H. 23.** 1. Alter 'Doh' to 'Ob'.

**H. 25.** Alter 'S. Shan States' to 'Dawnas'.

**H. 29.** Alter 'Ramb' to 'L'.

**H. 30.** 18. Commence new line from 'ni' after 'bhutez'.

**H. 31.** 7 a (1a). Alter 'upf' to 'unf'.

**H. 31.** 8. Insert locality 'Andamanas'.

**H. 31.** 10. Alter 'lugine' to 'cunilda'. This alteration is made in accordance with Mr. Toxopeus' recommendation.

**H. 34.** Alter in both places *fusca* to *cymbia*; Mr. Toxopeus informs me that *fusca* is a quite distinct species.

**H. 35** 6. Alter in both places 'casyapa' to 'caspius'.

**H. 36.** 2 (3a) alter to 2b (4a);  $\alpha$  to 2 (3);  $\beta$  to 3 (2) and delete 'epicles' before 'kohimensis', which Mr. Riley diagnoses as a distinct species.

**H. 36.** 3a (2) alter to 4a (2b); 3 (4a) to 4 (5a); substitute for the line 'tamu, etc.' as follows:

' $\alpha$ . Upf dark border broad. 2 seasonal forms.

*oda bakeri Riley.* (30-35). The Blue Saphire. Chitral to Kangra.

NR.

$\beta$ . Upf dark border comparatively narrow.

*oda oda, Hew.* Kangra to Kumaon. NR.'

Increase all remaining numbers in genus by 1. Mr. Riley has discovered that the type of *tamu* corresponds to the insect that passes under the name of *viridi punctata*.

**H. 36.** 6. Delete the second race and substitute:

'(*birmana*, *Fruh.*, was described in error and really = *marica* from Thibet.)'

This change is due to Mr. Riley.

**H. 36.** 7 Alter *viridi punctata*, *DeN*, in all 3 places to *tamu*, *Koll.*

**H. 42.** 4 (3) alter to 4a (3) and after 'green' in the first line insert '4 (5)' commencing a new line. After 'ataxus zulla,' etc., insert what now follows 10 (11), in order to put *letha* in its correct place, now that Capt. Drummond has discovered the ♀ in the S. Shan States, which locality should be inserted. Alter 5 (1a, 6a, 12a) to 6 (1a, 7a, 12a); 6a (1a, 5, 12a) to 7a (1a, 6, 12a); increase numbers up to 9a (5b) by 1; alter 9 (10a) to 10 (11); deleting 10 (11) et seq up to 11 (10) and running on from 'border' to 'Below'; alter 12a (1a, 5, 6a) to 12a (1a, 6, 7a).

**H. 45.** 1. Alter 'phaedrus' to 'aesopus' on the ground of priority. I have considerable doubt as to whether *aesopus* is not synonymous with *thetis* and that *saronis* is a race thereof.

**H. 45.** 5 (6). In the first line add 'or white' after 'orange'; at end of the description following α add '♀ with white discal areas' and at end of description following β add '♀ with orange discal areas.' Orange females of this group do not, I believe, occur north of the Karens.

**H. 50.** 1a (72a) alter to 1a (73a); 1b (16a) to 1b (17a); 15 (13.14) to 15a (13.14); 15a (15b) to 15 (16); 15b (15a) to 16 (15); 16a (1b) to 17a (1b); increase by 1 all remaining numbers in the genus except that 72a (1a) becomes 73a (1a).

**H. 50.** 8. Insert 'aedias' before 'opalina.'

**H. 50.** 55. Alter 'Fd.' to 'Stg.'

**H. 50.** 68. Alter 'N. Burma' to 'N. Shan States.'

**H. 50.** 70a (67b). In third line of description alter 75 to 69.

**H. 50.** 72. a. Alter 'M' to 'Hew.'

**H. 50.** 76. β. Alter 'apidanus, Cr' to 'kartaphilus, Fruh.'

**H. 50.** 80. β. Insert 'and S' after 'N.'

**H. 57.** *Apharitis* now takes the place of H. 56. *Spindasis*; delete (Plate 29), and in the second and third lines 'Above—orange'; alter 1a (2a) to 1a (3); 1a (1b) to 1 (2); 1b (1a) to 2 (1); *hypargyros* to *hypargyrus*; 2a (1a) to 3 (1a); and at the end of the description insert, running on, what now follows after 4 (5, 6a), deleting these numbers, so as to get *lilacinus* into its right place. After *lilacinus*, etc., insert,

**'H. 58. Spindasis.** The Silverlines (Plate 29).

Below as *Apharitis*. Above dark brown; males usually blue or blue shot. Unf apical markings as in *lilacinus*.

Alter 2b (14) to 1a (12); 2d (4a) to 1c (3a); 2 (3) to 1 (2); 3 (2) to 2 (1); 4a (2d) to 3a (1c); 4b (9) to 3b (7); 4 (5.6a) has been removed to *Apharitis*; 5 (4.6a) to 3 (4a); 6a (4.5) to 4a (3); then decrease by 2 numbers up to 8 (7); alter 9 (4b) to 7 (3b); 10a (2c) to 8a (1b); then decrease by 2 numbers up to 13 (10b); alter 14 (2b) to 12 (1a).

**H. 58.** 7. Alter 'Karens' to 'Dawnas.'

**H. 59.** Alter 'Hew' to 'Hub.'

**H. 61.** 2. Alter 'Shan States' to 'Dawnas'.

**H. 61.** 3. a. Alter 'lucida argentea, Aur.' to 'blanka sudica, nov.'; and under β alter 'lucida minturna, Fruh.' to 'blanka argentea, Aur.' Mr. Toxopeus has pointed out that *blanka DeN*, is the oldest name for this species and that *argentea* applies to the N. Indian form.

**H. 61.** 4. β. Alter 'Rangoon' to 'Dawnas'.

**H. 61.** 5. β. Alter 'Karens' to 'Dawnas'.

**H. 61.** 7. Alter 'N. Burma' to 'Dawnas'.

**H. 62.** Alter 'DeN.' to 'M'.

**H. 64.** Insert 'to S. Burma' after 'Assam'.

**H. 65.** 6. Alter 'oocela' to 'cta'.

**H. 65.** β. Alter 'Karens' to 'Dawnas'.

**H. 79.** Insert 'Dawnas to' before 'S. Burma'.

**H. 80.** Insert 'marciiana' before 'miniata', which I am convinced are conspecific and I hope shortly to define the Burmese races.

**H. 85.** 3. β. Alter 'Fruh' to 'M'.

**H. 89.** Add after description of genus:

'♂ brand uph always to base 6.'

Then insert

'1a (4). Unf discal band continuous.

1b (3). Unh no spot base 7.'

After 1 (2) insert.

'Unf discal band straight, prominent. Tuft dark brown.'

Delete the second 'isocrates' and add after 'India' 'to N. Shan States,' For  $\beta$  substitute.

'2 (1). Unf discal band absent or faint.'

delete 'isocrates', add '(40-44)' after 'Tytler' and add after 'Manipur' 'to N. Shan States. The Rosy Guava Blue. R.'

For 2 (1). substitute.

'3 (1b). Unh nearly always a spot base 7. Unf discal band elbowed; rarely a spot in the cell'.

Delete in lines 3 and 4 of the description 'discal band—to base 7.' Under  $\beta$  delete 'Unf very rarely spot in cell'.

For  $\gamma$  substitute.

'4 (1a). Unf discal band broken, lower part shifted in. Unh spot base 7 and usually spot in cell. Below paler, markings dark and prominent.'

Delete 'perse' and insert before 'Andamans.'

'(48-52). The Scarce Guava Blue.'

Omit the 'N' before 'Burma' under 3.  $\beta$ . *perse perse*. I am convinced upon evidence produced by Mr. Cooper that *rosacea* and *smilis* are good species.

H. 90. 1a. (7a) alter to 1a (8a); 4b (6b) to 4b (7); 4 (5.6a) to 4 (5.6); 6a (4.5) to 6 (4.5); 6b (4b) to 7 (4b); 7a (1a) to 8a (1a) and increase by 1 all remaining numbers in the genus.

H. 90. 19. Insert after the description :

a. ♂ upf red area very wide, much wider than the basal and apical dark areas and not crossed by dark veins.

*micans extensa nov.* (32-34). The Red Himalayan Flash. Chitral. C.

$\beta$ . ♂ upf red area narrower than the basal and apical dark areas and often crossed by dark veins.

Under  $\beta$  alter 'Chitral' to 'Kashmir'.

H. 90. 15. Alter 'Mussoorie' to 'Murree'.

H. 91. 1. Insert 'Bernardmyo' after 'Manipur'.

I. Genera key. 22 (20d) insert at end ' (=Entheus, Ob).' 34 (35) insert 'and Battus' after 'Scelothrix.' 95 (91b) delete '?' and after '=' insert 'Tanyptera, Mab and ?'

I. 1. 11. Insert ' and tyrius' after 'yanuna.'

I. 15. After 'queda, Pl' insert 'nibana, Früh'

I. 20. 7 and 11. Delete 'Clasp' at the end of the descriptions. I had furnished drawings of the clasps of these and other species, but the printers have been unable to reproduce them.

I. 24. 2. At end after 'Mab' insert : 'tenebrosa, J and T, Hainan.'

I. 25. 4. Insert at end 'VR.'

I. 25. 5. Insert at end 'Sikkim to Assam. VR.'

I. 32. 2. Before 'pelias, Früh,' insert 'danae, Pl'.

I. 71. 1. After 'prabha,' insert 'vasuba, savara'.

I. 74. 3  $\gamma$ . After 'Java' insert 'Borneo'.

Correction to Plates.

I. Alter A. 2. 16 to A. 2. 17.

II.-V. No change.

VI. Alter A. 12. 1 to A. 11. 1.

VII. Alter B. 6. 4. 5 and 6 to B. 6. 5. 6 and 7.

VIII. Alter in title 8 and 9 to 9 and 11.

IX. Alter B. 15. 6 to B. 15. 7; B. 16. 5 to B. 16. 6.; B. 16. 6 to B. 16. 7.

X. No change.

XI. Alter D. 3. 46, 49, 50 and 51 to D. 3. 47, 50, 51 and 52.

XII. Alter D. 3. 16, 20, 22, 23, 27, 31, 35, 38, 39, 40, 44 and 45 to D. 3. 17, 21, 23, 24, 28, 32, 36, 39, 40, 41, 45 and 46

XIII. Alter D. 8. 6 to D. 8. 5. and in title alter 10 to 11 and insert before it 9. Karanasa; 10. Paroeneis ;.

XIV. No change.

XV. Alter D. 25. 10 and 11 to D. 25. 11 and 12.

XVI-XVII. No change.

XVIII. Alter F. 7. 4 and 7 to F. 7. 5 and 8. Add 1 after F. 11.

XIX. Alter F. 18. 15, 17 and 18 to F. 18. 14, 16 and 17.

XX. Alter F. 18. 19, 21, 22, 24, 27, 28, 30 and 31 to F. 18. 18, 20, 21, 23, 26, 29 and 30.

XXI. No change.

XXII. *Alter* F. 26. 29 and 32 to F. 26. 28 and 32.

XXIII. No change.

XXIV. *Alter* F. 39. 12 and 13 to F. 39. 13 and 14.; also F. 40. 2, 3 and 7 to F. 40. 3, 4 and 5.

XXV. No change.

XXVI. *Alter* G. 4. 7 to G. 4. 6; H. 36. 5 to H. 36. 6; H. 42. 7 to H. 42. 8; in title alter '*Ilerda*' to '*Heliophorus*'.

XXVII. *Alter* H. 20. 14, 18 and 19 to H. 20. 15, 19 and 20; H. 44. 5 to H. 45. 5; H. 45. 1 to H. 46. 1; 47. 1 to 48. 1; 48. 1 and 2 to 49. 1 and 2; 94. 1 to 95. 1; also in title alter 44, 45-48 and 94 to 45. 46-49 and 95.

XXVIII. *Alter* 49 to 72 and advance all other numbers from 16 onwards by 1; also in title *alter* 49 to 50.

XXIX. First line increase all first or generic numbers by 1. Second line *alter* 56.2 to 58.1; 56.13 to 58.11; 57.2 to 59.1; 58.1 to 60.1; 59.1 to 61.2; and increase remaining first or generic numbers by 2.

Third and fourth lines increase all first or generic numbers by 2.

Fifth line *alter* 87.2 to 89.3 and increase all other first or generic numbers by 2.

Sixth line *alter* 88 to 90 in first four figures; 88.12 to 90.13; 90, 91, 92 and 93 to 91, 92, 93 and 94.

In title *alter* 50-52 to 51-53; 53-55 to 54-56; 56-57 to 57-59; 58-63 to 60-65; 64-70 to 66-72; 71-78 to 73-80; 79-80 to 81-82; 81 to 83; 82-84 to 84-86; 86-93 to 87-94.

XXX-XXXII. No change.

Most of the changes in Burmese localities are due to Mr. G. E. R. Cooper.

The following are new names:—

(a) B. and 10. '*indica*.' B. 6.4 '*burmana*,' B. 16.10. '*shandura*,' F. 35.1. '*magna*,' H. 61.3. '*sudica*,' H. 90.19. '*extensa*,' described by me.

(b) F. 7.1. '*cooperi*' described by Gen. Tytler in this number.

(c) H. 36.3. '*bakeri*' to be described by Mr. Riley.